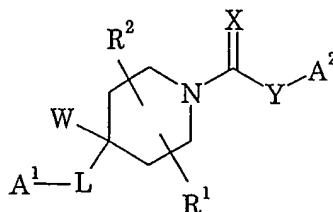


CLAIMS

1. A compound of formula (I):

5



(I)

wherein:

10  $A^1$  is phenyl, a six-membered aromatic heterocycle containing one, two or three nitrogen atoms, or a five-membered aromatic heterocycle containing up to four heteroatoms chosen from O, N and S, at most one heteroatom being O or S;

$A^1$  is unsubstituted or substituted by one, two or three substituents independently chosen from halogen,  $C_1$ -alkyl,  $C_2$ -alkenyl,  $C_2$ -alkynyl, halo $C_1$ -alkyl,  $C_1$ -alkoxy, halo $C_1$ -alkoxy, hydroxy, cyano, nitro and amino;

15  $A^2$  is phenyl, a six-membered aromatic heterocycle containing one, two or three nitrogen atoms, or a five-membered aromatic heterocycle containing up to four heteroatoms chosen from O, N and S, at most one heteroatom being O or S;

$A^2$  is unsubstituted or substituted by one, two or three groups independently chosen from halogen, cyano, nitro, amino,  $C_1$ -alkylamino, di( $C_1$ -alkyl)amino,  $C_1$ -alkyl  $C_2$ -alkenyl,  $C_2$ -alkynyl, halo $C_1$ -alkyl, hydroxy,  $C_1$ -alkoxy, halo $C_1$ -alkyl, thiol,  $SF_5$ , phenyl $C_1$ -alkyl and phenyl;

$L$  is a bond or  $C_1$ -alkylene;

$R^1$  and  $R^2$  independently chosen from hydrogen and  $C_1$ -alkyl;

or  $R^1$  and  $R^2$  may, together, form a methylene or ethylene bridge;

25  $W$  is halogen,  $C_1$ -alkyl, halo $C_1$ -alkyl,  $C_1$ -alkoxy or halo $C_1$ -alkoxy;

$X$  is O, S or  $NR^3$  where  $R^3$  is hydrogen, hydroxy,  $C_1$ -alkoxy,  $C_1$ -alkyl, cyano,  $C_3$ -cycloalkyl, a six-membered saturated heterocycle containing one or two heteroatoms independently chosen from O, N and S, and  $R^3$  is, if possible, optionally substituted by  $C_1$ -alkyl,  $C_1$ -alkoxy, halo $C_1$ -alkyl, halo $C_1$ -alkoxy,

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halogen, amino, nitro, hydroxy, phenyl, a six-membered aromatic heterocycle containing up to three nitrogen atoms or a five-membered aromatic heterocycle containing up to four heteroatoms chosen from O, N and S, at most one heteroatom being O or S;

- 5           or X, together with the atom to which it is attached, and Y, form an unsaturated five-membered ring together with A<sup>2</sup>;

Y is a bond, C<sub>1-4</sub>alkylene, NH or NH(CH<sub>2</sub>)<sub>1-3</sub>;

or a pharmaceutically acceptable salt thereof.

- 10           2.       A compound selected from:

4-fluoro-4-(3-methylpyridin-2-yl)-N-[4-trifluoromethylphenyl]piperidine-1-carboxamide;

4-fluoro-4-(pyridin-2-yl)-N-[4-trifluoromethylphenyl]piperidine-1-carboxamide;

4-fluoro-4-(pyridine-2-yl)-N-[4-trifluoromethylbenzyl]piperidine-1-carboxamide;

- 15       2-{4-fluoro-1-[4-trifluoromethylbenzoyl]piperidin-4-yl}pyridine;

2-(4-fluoro-1-{[4-trifluoromethylphenyl]acetyl}piperidin-4-yl)pyridine;

2-(4-fluoro-1-{3-[4-trifluoromethylphenyl]propanoyl}piperidin-4-yl)pyridine

4-fluoro-4-(1-methyl-1*H*-imidazol-2-yl)-N-[4-trifluoromethylphenyl]piperidine-1-carboxamide;

- 20       4-methoxy-4-(pyridin-2-yl)-N-[4-trifluoromethylphenyl]piperidine-1-carboxamide;

4-methoxy-4-(pyridin-2-yl)-N-[4-trifluoromethylbenzyl]piperidine-1-carboxamide;

4-fluoro-N-(4-isopropylphenyl)-4-(3-methylpyridin-2-yl)piperidine-1-carboxamide;

4-fluoro-4-(3-methylpyridin-2-yl)-N-{4-[1,2,2,2-tetrafluoro-1-trifluoromethylethyl]phenyl}piperidine-1-carboxamide;

- 25       N-(4-*Tert*butylphenyl)-4-fluoro-4-(3-methylpyridin-2-yl)piperidine-1-carboxamide;

4-fluoro-4-(3-methylpyridin-2-yl)-N-[4-(pentafluoro-λ<sup>6</sup>-sulfanyl)phenyl]piperidine-1-carboxamide;

N-(4-Butylphenyl)-4-fluoro-4-(3-methylpyridin-2-yl)piperidine-1-carboxamide;

- 30       N-(4-Benzylphenyl)-4-fluoro-4-(3-methylpyridin-2-yl)piperidine-1-carboxamide;

- N*-biphenyl-4-yl-4-fluoro-4-(3-methylpyridin-2-yl)piperidine-1-carboxamide;  
 4-fluoro-4-(3-methylpyridin-2-yl)-*N*-[5-trifluoromethylpyridin-2-yl]piperidine-1-carboxamide;  
 4-(3-chloropyridin-2-yl)-4-fluoro-*N*-[4-trifluoromethylphenyl]piperidine-1-carboxamide  
 5 4-fluoro-4-(3-fluoropyridin-2-yl)-*N*-[4-trifluoromethylphenyl]piperidine-1-carboxamide;  
 4-fluoro-4-(3-methoxypyridin-2-yl)-*N*-[4-trifluoromethylphenyl]piperidine-1-carboxamide;  
 10 4-fluoro-4-(3-methylpyridin-2-yl)-*N*-[4-trifluoromethylphenyl]piperidine-1-carbothioamide;  
*N*-cyano-4-fluoro-4-(3-methylpyridin-2-yl)-*N*-[4-trifluoromethylphenyl]piperidine-1-carboximidamide;  
 4-fluoro-4-(3-methylpyridin-2-yl)-*N*-(1-phenylpiperidin-4-yl)-*N*-[4-trifluoromethylphenyl]piperidine-1-carboximidamide;  
 15 4-fluoro-4-phenyl-*N*-[4-trifluoromethylphenyl]piperidine-1-carboxamide;  
 (+/-)-(syn)-4-fluoro-2-methyl-4-(3-methylpyridin-2-yl)-*N*-[4-trifluoromethylphenyl]piperidine-1-carboxamide;  
 4-(fluoromethyl)-4-pyridin-2-yl-*N*-[4-trifluoromethylphenyl]piperidine-1-carboxamide;  
 20 *syn* and *anti*-3-fluoro-3-pyridin-2-yl-*N*-[4-trifluoromethylphenyl]-8-azabicyclo[3.2.1]octane-8-carboxamide & 3-fluoro-3-pyridin-2-yl-*N*-[4-trifluoromethylphenyl]-8-azabicyclo[3.2.1]octane-8-carboxamide;  
 4-fluoro-4-pyrimidin-2-yl-*N*-[4-trifluoromethylphenyl]piperidine-1-carboxamide;  
 25 4-fluoro-4-(3-phenylpropyl)-*N*-[4-trifluoromethylphenyl]piperidine-1-carboxamide;  
 2-[4-fluoro-4-(3-methylpyridin-2-yl)piperidin-1-yl]-6-trifluoromethyl-1*H*-benzimidazole;  
 2-(4-fluoro-4-pyridin-2-ylpiperidin-1-yl)-6-(trifluoromethyl)-1*H*-benzimidazole;  
 4-fluoro-*N*-[4-trifluoromethylphenyl]-4-[3-trifluoromethylpyridin-2-yl]piperidine-1-carboxamide;  
 30 4-fluoro-*N*-(4-methylphenyl)-4-(3-methylpyridin-2-yl)piperidine-1-carboxamide;  
*N*-(4-ethylphenyl)-4-fluoro-4-(3-methylpyridin-2-yl)piperidine-1-carboxamide;  
*N*-(4-chlorophenyl)-4-fluoro-4-(3-methylpyridin-2-yl)piperidine-1-carboxamide;

4-fluoro-4-(3-methylpyridin-2-yl)-N-[4-trifluoromethoxyphenyl]piperidine-1-carboxamide;

N-(4-cyanophenyl)-4-fluoro-4-(3-methylpyridin-2-yl)piperidine-1-carboxamide;

N-[4-dimethylaminophenyl]-4-fluoro-4-(3-methylpyridin-2-yl)piperidine-1-

5 carboxamide;

and pharmaceutically acceptable salts thereof.

3. A pharmaceutical composition comprising one or more compounds of claim  
1 or 2, or pharmaceutically acceptable salts thereof in association with a  
10 pharmaceutically acceptable carrier or excipient.

4. A compound of claim 1 or 2, or a pharmaceutically acceptable salt thereof,  
for use in treatment of the human or animal body.

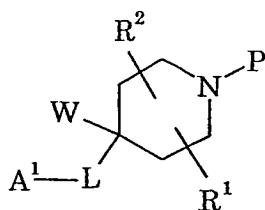
15 5. The use of a compound of claim 1 or 2, or a pharmaceutically acceptable  
salt thereof for use in the manufacture of a medicament for the treatment or  
prevention of physiological disorders that may be ameliorated by modulating VR1  
activity.

20 6. The use of a compound of claim 1 or 2, or a pharmaceutically acceptable  
salt thereof for use in the manufacture of a medicament for the treatment or  
prevention of a disease or condition in which pain and/or inflammation  
predominates.

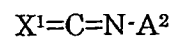
25 7. The process for the preparation of a compound of claim 1, which  
comprises:

(A) for compounds wherein Y is NH or NH(CH<sub>2</sub>)<sub>1-3</sub>, reacting a compound of  
formula (II) with a compound of formula (III):

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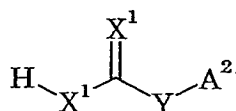
(II)



(III)

wherein  $X^1$  is O or S, P is H or a  $C_{1-6}$ alkoxycarbonyl group such as tert-butoxycarbonyl and  $A^1$ ,  $A^2$ , L,  $R^1$ ,  $R^2$  and W are as defined in claim 1;

- (B) for compounds wherein Y is a bond or  $C_{1-4}$ alkylene, reacting a compound of  
5 formula (II) with a compound of formula (IV):

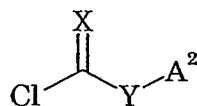


(IV)

- wherein both  $X^1$ s are O or S, Y is a bond or  $C_{1-4}$ alkylene and  $A^2$  is as defined in  
10 claim 1; or

- (C) for compounds wherein X, together with the atom to which it is attached,  
and Y, form an unsaturated five membered ring together with  $A^2$ , reacting a  
compound of formula (II) with a compound of formula (V):

15



(V)

- wherein X, together with the atom to which it is attached and Y, form an  
unsaturated five membered ring together with  $A^2$ .

20

8. A method for the treatment or prevention of physiological disorders that  
may be ameliorated by modulating VR1 activity, which method comprises

administration to a patient in need thereof of an effective amount of a compound of claim 1 or a composition comprising a compound of claim 1.

9. A method for the treatment or prevention of a disease or condition in  
5 which pain and/or inflammation predominates, which method comprises  
administration to a patient in need thereof of an effective amount of a compound  
of claim 1, or a composition comprising a compound of claim 1.

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